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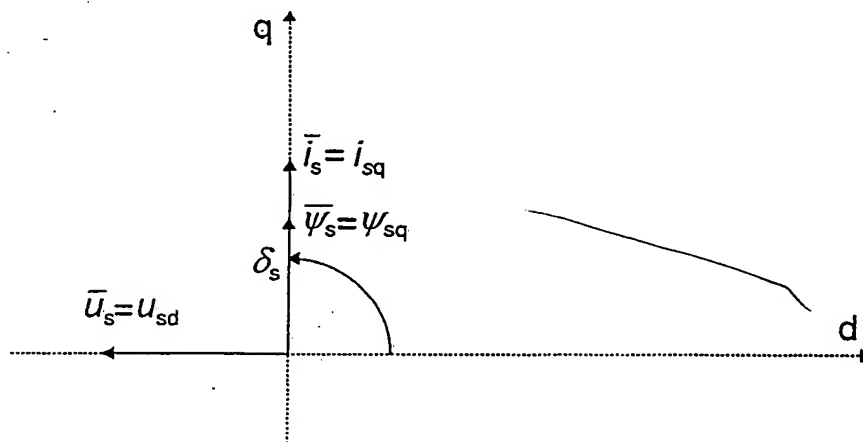
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(54) Title: **METHOD FOR DEFINING QUADRATURE-AXIS MAGNETIZING INDUCTANCE OF SYNCHRONOUS MACHINE**



(57) Abstract: Method for defin-
ing quadrature-axis magnetizing
inductance of a synchronous
machine, the synchronous
machine being supplied by an
inverter. The method comprises
steps, wherein the synchronous
machine is started without load
or with reduced load, the rotor
current of the synchronous
machine is kept substantially at
zero, the synchronous machine
is accelerated to initial angular
velocity of measurement, the load
angle (δ_s) of the synchronous
machine is guided substantially
to 90 degrees, the stator voltage
(u_s), the stator current (i_s) and

the electrical angular velocity (?) of the synchronous machine is defined and the quadrature-axis magnetizing inductance of the synchronous machine (L_{mq}) is defined on the basis of the stator voltage (u_s), the stator current (i_s) and the electrical angular velocity (?) of the machine.